UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

THE GREEN PET SHOP ENTERPRISES, LLC

Plaintiff,

v.

MAZE INNOVATIONS, INC.

Defendant.

Civil Action No. 1:15-cv-01138

Honorable Matthew F. Kennelly

MAZE INNOVATIONS, INC.'S REPLY CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION

During prosecution of the Patents-in-Suit, Green Pet significantly narrowed the scope of each of the pending claims to avoid the prior art and obtain allowance. Now that it is asserting its claims in litigation, however, Green Pet seeks to renege on these representations and read its claims more broadly. The Patent Office would not have allowed the claims if Green Pet had presented the arguments it now makes to this Court. Indeed, the Patent Office specifically rejected Green Pet's broad claims and required that *specific limitations* with *specific meanings* be added. Once those limitations were added, the Examiner issued the Notice of Allowance. It is contrary to black letter law to allow Green Pet, through claim construction in this Court, to recapture claim scope it surrendered to obtain allowance before the Patent Office. *See Bd. of Regents v. BENQ Am. Corp.*, 533 F.3d 1362, 1369–70 (Fed. Cir. 2008).

Green Pet also attacks Maze's proposal to construe larger phrases rather than individual terms. *See*, *e.g.*, Opp. at 1, 2, 7–8. But Green Pet and the Patent Office added the phrases Maze proposes for construction as phrases, rather than as individual terms, and attributed meaning to those phrases in their entirety. To accurately provide Green Pet with the claim scope the Patent Office allowed, construing the larger phrases is necessary. Maze's proposed constructions track Green Pet's arguments to the Patent Office, consistent with Green Pet's amendments to the claims, and mandated by the intrinsic record. Maze's proposed constructions merely seek to hold Green Pet to its representations to the Patent Office, and therefore should be adopted.

¹ It is unclear why Green Pet chose not to file its Opposition Brief with the Court. Because Green Pet's brief was not filed, a copy of the brief Green Pet served is attached as Exhibit A. Maze's citations to the Opposition Brief will be "Opp."

II. CONSTRUCTION OF DISPUTED TERMS

A. The Parties Agree That "Pressure" Means "Force Per Unit Area"

Claim Term	Defendant's Construction	Plaintiff's Construction
pressure	force per unit area	no proposed construction

In its Opposition, Green Pet appears to agree with Maze's construction of the term "pressure" as "force per unit area." Opp. at 8 ("Now that the term pressure is no longer in dispute . . ."); see also id. ("The parties do not dispute the term[] pressure . . ."). Given this concession, as well as for the reasons provided in Maze's Opening Brief, "pressure" should be construed as "force per unit area." See Dkt. No. 70 at 10–11.

B. Green Pet's Attempt To Construe "Recharging" Alone Is Unsupported And Fails To Account For Its Representations To The Patent Office

Claim Term	Defendant's Construction	Plaintiff's Construction
a pressure activated recharging cooling	a composition that undergoes a reversible chemical reaction	reversing
composition	upon the application and	
	release of pressure	

Green Pet asserts that this Court should adopt its proposed construction of the term "recharging" to mean "reversing." Opp. at 12. Yet, Green Pet provides *no factual or legal support* for this construction, other than its statement, without citation, that the term "reversing" appears near the term "recharging" in the specification of U.S. Patent No. 8,720,218 ("the '218 Patent"). *Id.* (citing Ex. A to Opp.). Instead of providing the necessary support for its own construction, Green Pet spends nearly its entire argument on this term explaining why Maze's

In Maze's Opening Brief, Maze provided specific citations to the PTAB decision and admitted that the PTAB found Green Pet's arguments in the IPR persuasive for the term "pressure." *See*, *e.g.*, Dkt. No. 70 at 5 ("In reaching its conclusion, *the PTAB found persuasive* Green Pet's argument . . ." (emphasis added)); *see also id.* at 6, 10. It is unclear why Green Pet argues otherwise. *See*, *e.g.*, Opp. at 6 n.5, 7.

proposed construction is improper. *See id.* at 12–15. Green Pet's attempt to argue against Maze's proposed construction fails for numerous reasons.

Green Pet asserts that it should not be held to the representations it made to the Patent Office to obtain allowance of the Patents-in-Suit because it "did not amend to overcome the prior art." Opp. at 14. Green Pet argues that it "simply added the language 'pressure activated recharging cooling composition' based on [the] fact that it described the invention more clearly (based on the Examiner's suggestion)." *Id.* (citing JA0094). Green Pet fails to understand, however, that *adding* language to its pending claims to obtain allowance is *amending* the claims.

Further, it is clear based on the timeline of the proceedings before the Patent Office that this added language, coupled with Green Pet's arguments, was *the reason* the Examiner found the claims to be distinguished over the prior art, and thus was *the reason* for allowance. A timeline of relevant events and Green Pet's representations is provided below:

- **April 14, 2010**: Green Pet filed a patent application for a "Cooling Platform" and proposed claims without the phrase "pressure activated recharging cooling composition." JA0170–184.
- July 31, 2013: The Patent Office rejected Green Pet's claims based on "common knowledge' of various cooling pads or pouches comprising compositions activated by pressure when squeezed in order to provide a simple and quick low temperature source." JA0123.
- **September 9, 2013**: Green Pet added the language "pressure activated recharging cooling composition" to its rejected claims. JA0057–65. With this amendment in hand, Green Pet argued why its purported invention is different from the cited art in a Response to Non-Final Office Action, focusing on the fact that its invention

claimed a *reversible chemical reaction* driving a decrease and increase in temperature. *See, e.g.*, JA00102 (Prior art reference did not "disclose any terms identical or relating to the application and release of pressure to drive a chemical reaction to decrease and increase in temperature."); *see also id.* at JA00102 ("The 'stretching' refers to the elastic property of the superporous hydrogel, and the 'unloading' is simply the superporous hydrogel reverting back to its natural state after being stretched. This is not the same as the application and release of 'pressure,' further, the application and release of pressure *to drive a chemical reaction*." (emphasis added)); *id.* ("Applicant respectfully disagrees that stretching and unloading discloses the application and release of pressure to drive *a reversible chemical reaction*." (emphasis added)).

• **February 6, 2014**: To ensure the claim language tracked Green Pet's prior arguments distinguishing the art, the Examiner amended Claims 1 and 19 to "delete 'a pressure activated recharging cooling composition' and replace with -- a pressure activated recharging cooling composition within the temperature regulation layer, the pressure activated recharging composition endothermically activated and endothermically deactivated upon the application and release of pressure, respectively --." JA0032. Based on this amendment, the Examiner allowed the claims to issue. JA0033.

Despite this clear limitation of claim scope, Green Pet asserts that its statements to the Patent Office and claim amendments should not be restrictive. Green Pet is wrong. The Federal Circuit's decision in *Board of Regents v. BENQ America Corp.*, 533 F.3d 1362 (Fed. Cir. 2008), is instructive. In *Board of Regents*, "[t]he examiner then mailed a notice of allowability

containing an examiner's amendment that made various changes to the claims, which resulted in the issuance of the [patent at issue]." *Id.* at 1365. In finding the examiner's amendment limiting on the scope of the claims, the Federal Circuit explained: "the prosecution history may be given substantial weight in construing a term where that term was added by amendment." Id. at 1369 (emphasis added). Similarly, in *Jansen v. Rexall Sundown, Inc.*, 342 F.3d 1329 (Fed. Cir. 2003), the Federal Circuit held that because the claim phrases at issue were added to gain allowance of the claims, the court "must [] give them weight, for the patentability of the claims hinged upon their presence in the claim language." Id. at 1333; see also Smith v. Magic City Kennel Club, Inc., 282 U.S. 784, 790 (1931) ("The applicant[,] having limited his claim by amendment and accepted a patent, brings himself within the rules that if the claim to a combination be restricted to specified elements, all must be regarded as material, and that limitations imposed by the *inventor*, especially such as were introduced into an application after it had been persistently rejected, must be strictly construed against the inventor and looked upon as disclaimers." (emphasis added)). Green Pet's attempt to now turn its back on the representations it made to the Patent Office should be rejected.

Green Pet also claims that Maze's construction "glosses over the written description" (Opp. at 15) and that Maze improperly relies on the prosecution history, which lacks the clarity of the specification. Opp. at 14. These arguments both fail as well. Maze's Opening Brief quotes the specification of the Patents-in-Suit, which provides for the same type of reversible reaction Green Pet argued about during prosecution. Dkt. No. 70 at 11–12 (citing JA0010 at 3:17–25). Further, the Federal Circuit has explained that while the prosecution history can sometimes lack clarity of other intrinsic sources, as Green Pet argues (Opp. at 14), that is not typically the case where the phrase to be construed was added by amendment. *Bd. of Regents*,

533 F.3d at 1369; see also, e.g., Inverness Med. Switz. GmbH v. Warner Lambert Co., 309 F.3d 1373, 1380 (Fed. Cir. 2002) ("[F]ailure to object to an examiner's interpretation of a claim ordinarily disclaims a broader interpretation.").

Green Pet unambiguously represented that the claim phrase "a pressure activated recharging cooling composition" necessarily requires a composition that undergoes a chemical reaction upon the application and release of pressure and that this chemical reaction must be reversible. JA0101–102. Those representations are consistent with the specification of the Patents-in-Suit. Dkt. No. 70 at 11–12 (citing JA0010 at 3:17–25). Green Pet made these representations to obtain allowance; it should not now be allowed to walk back those representations because the claims, as allowed, are narrower than Green Pet would like them to be. Therefore, "a pressure activated recharging cooling composition" should be construed as "a composition that undergoes a reversible chemical reaction upon the application and release of pressure."

C. Green Pet's Constructions Of The "Endothermic" Terms Alone Are Improper And Contradict The Clear Intrinsic Record

Claim Term	Defendant's Construction	Plaintiff's Construction
the pressure activated recharging cooling composition endothermically activated upon the application of pressure	the composition decreases in temperature when pressure is applied	absorbs heat
the pressure activated recharging cooling composition endothermically deactivated upon the release of pressure	the composition increases in temperature when pressure is released	releases heat

Green Pet argues that "endothermic" is defined as the "absorption of heat" and the Patents-in-Suit use the term consistent with its ordinary meaning. Opp. at 9–10 (citing Ex. A to

Opp.). Based on this argument, Green Pet claims that its proposed constructions of "endothermically activated" as "absorbs heat" and "endothermically deactivated" as "releases heat" are proper. *Id.* at 9–12. But Green Pet's proposed constructions fail to give meaning to each term in the claim and contradict the amendment to which it agreed to obtain allowance of its claims.

Green Pet's constructions fail to give meaning to the claim requirements of "activat[ion]" and "deactivat[ion]." For example, Green Pet has defined "endothermically activated" to mean the same thing as the unmodified term "endothermic." *See* Ex. A to Opp. at 382. Under Green Pet's proposed construction, the word "activated" carries no meaning, and cannot be correct. *Merck & Co. v. Teva Pharms. USA*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) ("A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so."); *see also, e.g., Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1348–50 (Fed. Cir. 2012); *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006) (Claim terms must be "interpreted with an eye toward giving effect to all terms in the claim."). Green Pet's attempt to gloss over the *activation* required in the claims is not surprising given that it does not want to be held to the representations it made to the Patent Office.

Green Pet again shuns the representations it made to the Patent Office, which were necessary for the Examiner to allow the amended claims. To overcome prior art rejections, Green Pet added the following claim language: "the pressure activated recharging cooling composition activated and deactivated upon the application and release of pressure, respectively." JA0062–64. The Examiner suggested, and Green Pet accepted, a further amendment to this language to comport with Green Pet's arguments regarding the scope of its claims: replacing "composition activated and deactivated" with "composition endothermically

activated and endothermically deactivated." JA0032–33. The issued claims include the amendment and the full language of the phrase for each of the Asserted Claims is "the pressure activated recharging cooling composition endothermically activated and endothermically deactivated upon the application and release of pressure, respectively." *See*, *e.g.*, JA0012 at cl. 15.

In arguing with the Examiner over the meaning of "the pressure activated recharging cooling composition endothermically activated . . . upon the application . . . of pressure" (the term Maze seeks to have construed), Green Pet successfully convinced the Examiner that this phrase meant "a composition that *decreases in temperature* when pressure is applied." JA0094–95 (emphasis added); *see also* JA0101; JA0102. This is the *exact* construction that Maze is proposing. This construction also provides meaning to the "activation" requirement, as is proper when construing claim terms. In particular, the activation of the chemical reaction occurs when pressure is applied to the claimed composition. Thus, the composition is akin to an ice pack that becomes cool (i.e., the temperature decreases) when pressure is exerted on it to cause a chemical reaction to take place.³ The purported distinction between Green Pet's "invention" and a pressure-activated ice pack is that the claimed mat then undergoes a *reversible* chemical reaction to go back to its original state and be used again, which is where "endothermically deactivated" finds its meaning. *See, e.g.*, Opp. at 3 ("[I]t became crucial that the invention be reusable and recharge after multiple uses.").

In particular, during prosecution, Green Pet argued that "endothermically deactivated" meant that the "composition . . . recharges when pressure is released." JA0094–95; see also

This type of pressure-activated cooling is well-known in the art. *See*, *e.g.*, JA0115 ("[T]he Examiner takes the Official Notice of facts not in the record by relying on 'common knowledge' of various cooling pads or pouches comprising compositions activated by pressure when squeezed in order to provide a simple and quick low temperature source.").

JA0101 ("[A] composition that decreases in temperature upon pressure activation; and recharges on the release of that pressure - as claimed in Applicant's invention."). Green Pet's arguments confirm that "recharges" is referring to an increase in temperature. JA0102; *see also* JA0010 at 3:17–25. Again, this is the *exact* construction Maze seeks here and the one this Court should adopt. *See Bd. of Regents*, 533 F.3d at 1369 ("[T]he prosecution history may be given substantial weight in construing a term where that term was added by amendment.").

Finally, Green Pet's attempt to broaden its claims contrary to its representations to the Patent Office is surprising given the extensive prior art related to simple heat absorption devices, which served as part of the basis for Maze's Petition for IPR of the '218 Patent.⁴ See, e.g., JA0386–87; see also Evolutionary Intelligence, LLC v. Sprint Nextel Corp., No. C-13-03587, 2014 WL 4802426, at *4 (N.D. Cal. Sept. 26, 2014) (holding that the record of an IPR becomes part of the prosecution history of the patent). For example, U.S. Patent No. 7,324,340 to Xiong, cited in Maze's Final Invalidity Contentions and in Maze's IPR Petition, discloses a cooling pad that contains a "compound . . . to effectively transfer heat away from the [object] by conduction." Ex. B at Abstract. Similarly, U.S. Patent No. 7,036,162 to Gatten discloses that its cooling platform preferably uses a conductive heat transfer material for the cooling medium. Ex. C at 1:60-63, 2:57-60. Green Pet overcame this art in the IPR by arguing that it was not related to the claimed "pressure activated recharging cooling composition." JA0462. Thus, despite again representing to the Patent Office that its claims require something more than the simple transfer of heat, Green Pet seeks this Court's assistance to broaden its claims beyond what the Patent Office would ever have allowed. Green Pet's constructions should be rejected.

⁴ It is even more surprising given that Green Pet's arguments to the Patent Office focused on the activation and deactivation language (not the endothermic nature), and Green Pet now seeks to completely ignore the activation and deactivation language.

III. CONCLUSION

For the reasons set forth above and those in Maze's Opening Brief (Dkt. No. 70), Maze respectfully requests that this Court adopt its proposed constructions of the claims terms at issue.

Dated: September 8, 2016 Respectfully submitted,

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